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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,062	01/29/2001	Adrian P. Wise	94100414(EP)USC1X1C1D3 PD	8453

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DISCOVISION ASSOCIATES
INTELLECTUAL PROPERTY DEVELOPMENT
2355 MAIN STREET, SUITE 200
IRVINE, CA 92614

EXAMINER	
NGUYEN, DUSTIN	
ART UNIT	**PAPER NUMBER**
2154	

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/771,062	WISE ET AL.	
	Examiner	Art Unit	
	Dustin Nguyen	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 7 are presented for examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/09/2005 has been entered.

Response to Arguments

3. Applicant's arguments filed 12/09/2006 have been fully considered but they are not persuasive.

4. As per remarks, Applicants' argued, on the new amended claims 1 and 4, that (1) Nukiyama, taken alone or in any combination, does not teach, suggest, or describe how to use data and control tokens in a single bus.

5. As to point (1), Examiner disagrees with the above remark. Nukiyama discloses a system for providing a common bus 48 [i.e. single bus] independently of the pipeline bus, any arbitrary pipeline stage can be selected to couple the data input and data output of that pipeline stage to the common bus 48. In other words, a desired pipeline stage can be coupled to the common bus 48 and thereby data can be directly set in the designated stage or data can be directly read out therefrom through the common bus 48 [col 9, lines 8-31]. In addition, Nukiyama discloses an example of how to select an independently pipeline stage by using address information and data buffer through a common bus [i.e. control token and data in a single bus] [Figure 5; and col 9, lines 48-col 10, lines 9].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvath et al. [US Patent No 5,450,599], in view of Nukiyama [US Patent No 4,658,354].

8. As per claim 1, Horvath discloses the invention substantially as claimed including a method of storing data, comprising:

receiving a sequence of data words of a first predetermined width [col 1, lines 15-25 and lines 37-41; and col 9, lines 32-34] and different respective formats either serially or in parallel [i.e. serial or sequential] [col 1, lines 15-19; col 1, lines 33-37; and col 10, lines 20-37];

splitting the data words of the received sequence to form new data words of a new sequence, the new data words having a second predetermined width [col 6, lines 63-col 7, lines 3; and col 7, lines 62-col 8, lines 2];

packing the new data words consecutively in a token buffer of a second width without holes between the new data words [col 8, lines 3-24]; and

unpacking the new data words to reproduce a new sequence of the new data words [claim 14].

Horvath does not specifically disclose

using said new data words in a pipeline, a portion of said new data words capable of being used to prepare said pipeline for processing at one or more stages.

Nukiyama discloses

using said new data words in a pipeline [i.e. various commands and new data are generated in each pipeline stage, and these generated commands and new data are transferred through a pipeline bus to the latch of the next stage to be processed] [col 3, lines 47-53; and col 6, lines 59-63], a portion of said new data words capable of being used to prepare said pipeline for processing at one or more stages [i.e. arbitrary pipeline stage can be selected] [Figure 4; col 2, lines 35-43; and col 9, lines 10-25], using a single bus [col 9, lines 8-31; and col 9, lines 48-col 10, lines 9].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Horvath and Nukiyama because Nukiyama's teaching of selecting arbitrary pipeline stage would allow individual stage to independently process information [Nukiyama, Abstract].

9. As per claim 2, Horvath discloses writing a block of data from the token buffer to a random access memory device configured to store the words of the second width [col 8, lines 11-14; and col 13, lines 17-18].

10. As per claim 3, Horvath discloses expanding out run length code in the new words [col 6, lines 6-9; and col 7, lines 3-6].

11. As per claim 4, it is rejected for similar reasons as stated above in claim 1. Furthermore, Horvath discloses an inverse modeler, comprising:

a data unpacker to unpack data words received from an input terminal either serially or in parallel to a different length format [i.e. serial or sequential] [col 1, lines 15-19; col 6, lines 63-col 7, lines 3; and col 7, lines 62-col 8, lines 2];

a data expander coupled to the data unpacker [col 8, lines 3-24].

a data padder to pad data tokens received from the data expander [col 4, lines 10-12].

12. Claims 5 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvath et al. [US Patent No 5,450,599], in view of Nukiyama [US Patent No 4,658,354], and further in view of Morrison et al. [US Patent No 4,985,766].

13. As per claim 5, Horvath and Nukiyama do not specifically disclose the data expander expands out run length codes into runs of zero followed by a level in packed data. Morrison discloses the data expander expands out run length codes into runs of zero followed by a level in packed data [col 7, lines 40-54]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Horvath, Nukiyama and Morrison because Morrison's teaching would the fullness of the output buffer may be used to determine the quantisation factor [Morrison, col 1, lines 33-44].

14. As per claim 6, Morrison discloses the padder pads the last word of expanded tokens [col 2, lines 32-35; and col 4, lines 13-15].

15. As per claim 7, Morrison discloses the data unpacker deletes data between a flush signal and a block end signal [col 5, lines 1-47].

16. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is 571-272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Follansbee John can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dustin Nguyen
Examiner
Art Unit 2154

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100